

# Integrity 150

Transmit Smart Data From The Edge



Integrity 150 is a next-generation, solar-powered data transmitter and asset tracker that interfaces with industry-standard sensors over Bluetooth® and delivers Smart Data from the Edge. Users can quickly program AI-enabled applications and computing solutions using the Realm Enablement Suites, Edge Application Platform to process location and sensor data at the edge for low-cost Smart Data transmission.

## Edge Application Platform

Quickly program AI applications for processing Smart Data. The low-code Edge Application Platform is the key to unlocking the unlimited capabilities of these rugged, reliable devices in the field and slashing hundreds of hours of development time. The standards-based architecture means that new features and platform upgrades can reliably access the same hardware interfaces, APIs, and applications as previous versions with no specialized coding.

The Platform provides access to the firmware and base applications that run the devices and an extensive and growing library of applications to interface with sensors measuring temperature, humidity, magnetic fields, angular position, motion, proximity, and other metrics.

## Benefits

- Maintenance-free, solar powered device providing up to 10+ years of usable service
- Delivers reliable worldwide location reporting – providing security and improved efficiency
- Simple application – requires no harnesses, external power or antennas
- User selectable speed and heading operation
- Industry standard BLE encryption plus cloud-based key management plus configurable BLE sensor security
- Magnetic tamper switch
- Wide range of reporting capabilities, including:
  - Fixed or interval GPS location reporting
  - Change of location and motion alerts
  - Reduced messaging and theft recovery modes
  - Customizable messages
  - Broad range of data transmission capabilities

## Accessories

- Stainless SteelMount (Part No. 1850-0410-01)
- Bluetooth Dongle (Part No. 1950-0105-01)

## Realm Enablement Suite

- SubscriberManagement** – Provisioning, connectivity, and configuration
- Device Management** – Single interface, device inventory, and common APIs
- Health Monitoring** – Pro-active device health monitoring, and superior support
- Application Enablement Platform** – Leverage industry leading BLE, Nordic C, and comprehensive unified APIs
- Applications** – Extensive library of application software
- Common Architecture** – Simplified design with common hardware and software architecture
- BLE** – Sophisticated libraries for sensors, updates, configuration, and data

## Potential Applications

**Transportation:** Monitor and track assets and fleet movements even in remote locations

**Oil and Gas:** Aids in mobilization and deployment of high value assets in the field

**Construction:** Determine if, when and where equipment is being used

**Security:** Keep track of mobile assets such as rail cars, propane tanks and AgTech

**Maritime:** Monitor and track high value assets, such as boats, barges and containers, at the dock and offshore

**Other industry uses:** Mining, forestry, government, fisheries, and many more

## Feature Set

### Standard & Customizable Messaging

Wake, GPS locate, transmit location, resume sleep settings  
4 standard message types can send up to 144 bytes of data  
Modular message types with up to 144 bytes of data  
Configurable message priority  
Configurable message retry profile  
Prioritized message queue  
Interval or time-of-day messaging

### BLE5

Secure BLE Config service  
Industry standard encryption  
Cloud-based key management  
Configurable BLE sensor security

### Tamper Detection

Magnet-based

### Integrated Accelerometer

Message on start and stop  
Engage interval override on motion for set time or while in motion  
  
Supervisory reporting schedule triggered by alarm or motion  
Transmits GPS location on interval for programmed time or while alarm remains active

### Change Of Location

Theft-alert reporting based on distance moved  
Reduced messaging mode  
REST APIs  
Secure cloud store-and-forward

## Technical Specifications

### Dimensions

9" (L) x 3.38" (W) x 1" (H)  
264 mm x 86.1 mm x 25.4 mm

### Weight

14.2 oz/402 g  
With optional mounting bracket 32.02 oz. (908 g)

### Operating Temperature

-40°F to 185°F (-40°C to +85°C)

### Satellite Technology

Global LEOSatellite operation using the Globalstar Satellite Network. See Globalstar website for Coverage Map

### Certifications

FCC, ISED, CE, UKCA  
PENDING: ANATEL

### Standards

IP68/69K  
IEC 60945 (Maritime)  
MIL-STD-810G for:  
High and Low Temperature  
– Immersion  
– Dust  
– Water spray  
– Thermal shock  
– Mechanical shock  
– Rail impact  
– Vibration (rail, truck)